



Louisville and Jefferson County Metropolitan Sewer District  
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[www.msdlouky.org](http://www.msdlouky.org)

June 26, 2006

Mr. Femi Akindele  
Remedial Project Manager  
Kentucky/Tennessee Section  
U.S. Environmental Protection Agency  
Region IV  
61 Forsyth Street  
Atlanta, GA 30303

**Re: Result of Air Quality Monitoring - FY 06, Fourth Quarter (FY06-4Q),  
Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on  
Consent, USEPA Docket No-91-32-C**

Dear Mr. Akindele:

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.2, Air Quality Monitoring, attached for your information and files is one photocopy each of the following items, prepared by URS Corporation, 1600 Perimeter Park Drive, Suite 100, Morrisville, North Carolina 27560 and received by MSD on June 21, 2006.

1. URS Corporation letters dated June 15, 2006, 2 pages.
2. Figure 1, Lees' Lane Landfill, Sampling Locations, 1 page.
3. Table 1, TO-15 Data Summary for Ambient Air Samples at the Lees' Lane Landfill, Sampling date: April 25, 2005, 1 page.
4. Table 2, On-Site Meteorological Data, Sampling date, April 25, 2005, 1 page.
5. Table 3, TO-15 Data Summary for Gas Monitoring Well Samples at the Lees' Lane Landfill, Sampling date: April 25, 2005, 1 page.



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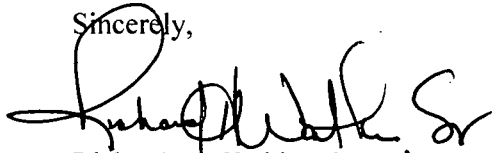
Mr. Femi Akindele

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Please advise if you have any questions concerning the attached information.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard H. Watkins, Sr.", written over the word "Sincerely,".

Richard H. Watkins, Sr.  
Infrastructure Liaison

RHW/rw  
Lees-06-4Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet  
Mr. Ken C. Logsdon, Division of Waste Management  
H. J. Schardein, Executive Director  
Michael Griffith  
Lees Lane File



URS Corporation  
1600 Perimeter Park Drive  
Morrisville, North Carolina 27560  
Telephone: 919.461.1100  
Fax: 919.461.1415

31824218.4002

June 15, 2006

Mr. Rick Watkins  
Louisville Metropolitan Sewer District  
3050 Commerce Center Place  
Louisville, KY 40211

Dear Rick:

Enclosed is the summary analytical report for the ambient air and gas monitoring well samples collected at the Lee's Lane Landfill site on April 25, 2006(Quarter 39). All six ambient samples, along with all six (G1, G2, G3, G4, G5R, G5L) well samples and a Field Blank were taken on April 25, 2006.

A map of the site, labeled with the sample collection locations for your reference, is shown in Figure 1. Table 1 is a tabular summary of the ambient samples with the primary analytes required for submission to EPA. Ambient air samples indicate low levels of methylene chloride and vinyl chloride at a similar level compared to the last reporting quarter. Methane was lower at each location versus last quarter's sampling while benzene and toluene increased from (0.177 - 0.286) and (0.94 - 2.4) to (0.338 - 0.653) and (2.73 - 6.38) respectively. There were several differences in the non-primary analytes: Ambient concentrations of carbon tetrachloride were higher (0.159-0.356 ppb) than in the previous sampling event (ND-0.107 ppb) in September 2005 as were propylene (0.477-1.12 ppb) versus (0.284-0.586 ppb), while trichlorfluoromethane (0.275-0.482 ppb) were lower than September 2005 (2.070-3.730 ppb).

The sampling locations were chosen based on a combination of prevailing on-site meteorology and accessible sites in the adjacent residential neighborhood per the standard sampling protocol. The meteorological conditions were moderate to warm (59-71°F) with wind speeds ranging from calm to 5.0 mph during the sampling day. The information displayed in Table 2 was obtained from the Louisville International Airport (Standiford Field) National Weather Service Station. The ambient air samples were collected in Summa canisters positioned 3-5 feet above ground level, integrated over an approximate 8.0-hour collection period.

The methane analysis was performed by GC/FID using a separate analytical system from the TO-15 analysis employed at STL in Austin. The TO-15 analytical methodology using Gas Chromatography/Mass Spectrometry (GC/MS) was employed. Samples were handled with standard laboratory chain-of-custody procedures. Sample canisters and flow controllers were cleaned and blanked using method TO-12 for total nonmethane hydrocarbons prior to field deployment. All of the samples were successfully collected and analyzed for methane and the TO-15 target analytes. Quality control parameters of precision (repeatability) and spiking of surrogate compounds meet internal URS and project-required specifications.



Mr. Rick Watkins  
June 15, 2006  
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The reliability of this data set can be characterized as good, based on the repeatability (analytical precision), surrogate spike recoveries, blank levels and the relatively few number of unresolved interfering peaks in the sample chromatograms. The April 25, 2006 field blank canister reported a positive hit for dibromochloromethane (0.314 ppb) and toluene (0.0254 ppb), which is a result that is less than the sample specific method detection limit. The reported results have not been blank corrected in attached tables per our standard project procedure.

Table 3 is a tabular summary of the gas well samples with the primary analytes required for submission to EPA. The gas monitoring wells were screened with a GA-90 analyzer to test for the presence of methane prior to field sample collection. Methane was detected with the instrument at one well. Well, G1, had a reading of 3.4% methane for the left well and 9.1 % methane for the right well. Both readings were taken at the initial opening of the sampling port. Gas well G1 contained concentrations of analytes that varied from the concentrations measured in September 2005. In particular, gas well G1 concentrations of benzene (Non-Detectable compared to 37.2 ppb September 2005), and toluene (0.386 ppb) were lower compared to the previous sampling event.

Analytical results from gas wells G2, G3, G4, G5R, and G5L varied from those reported from the previous sampling event. Most results showed detectable readings for compounds that registered as non-detectable during the September 2005 sampling event. There were decreases in the benzene, chloroethane and methane concentrations from September 2005.

URS appreciates the opportunity to assist your staff with this project. Please advise me at (919) 461-1242 if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Robert F. Jongleux'.

Robert F. Jongleux  
Project Manager

Enclosure

cc: Michael Kajder, URS/LOU  
Project File/Task 39

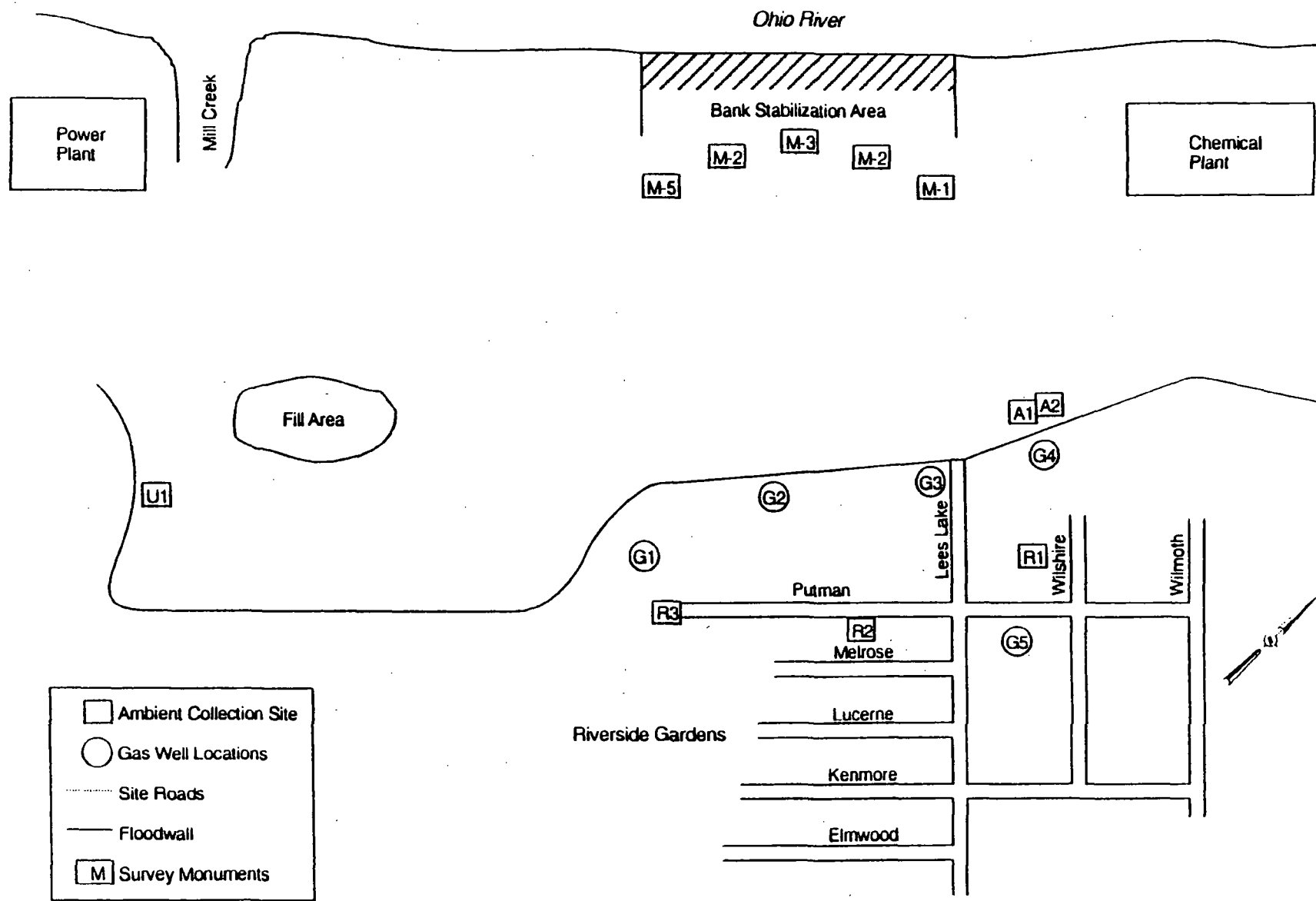


Figure 1. Lees Lane Landfill Sampling Locations

**Table 1**  
**TO-15 Data Summary for Ambient Air Samples**  
**at the Lee's Lane Landfill**  
**Sampling Date: April 25, 2006**

Sample ID	Ambient Air Samples					
	U1	A1	A2	R1	R2	R3
Canister ID	RA2031	RA2036	RA2029	HL0941	RA2035	RA2104
Dilution Factor	2.854	3	4	2.785	2.774	2.650
Location	Upwind	On-site	On-site(dup)	Residential	Residential	Residential
Veriflow ID	A181856	A134120	A218796	A218962	A168571	A218997
Compound (ppbV)						
Benzene	0.62	0.34	0.65	0.55	0.63	0.59
Methylene chloride	0.27	0.17	0.46	0.32	0.37	0.33
Toluene	5.05	2.73	6.38	5.00	3.68	3.51
Vinyl chloride	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.56	0.27	0.50	0.48	0.11	0.10
Methane (ppmV)	5.60	6.15	7.26	6.32	6.03	8.05

ND = Non Detect

**Table 2**  
**Local Meteorological Data**  
**Ambient Air Samples**  
**Sampling Date: April 25, 2006**

Time	Barometric Pressure (in Hg)	Temperature (F)	Dewpoint (F)	Wind Direction (from)	Wind Speed (mph)	Observation
8:00	29.84	60	53	SOUTH	3.000	Partly Sunny
9:00		61	55	SOUTHEAST	3.000	Cloudy
10:00		63	57	EAST	3	Cloudy
11:00		67	60	SOUTH	3	Cloudy
12:00		70	60	CALM	01/00/00	Cloudy
1:00		71	62	CALM	0	Cloudy
2:00		66	61	NORTH	15.00	Rain
3:00		60	56	NORTH	18.00	Cloudy
4:00		59	54	NORTH	13.00	Cloudy
5:00		59	52	NORTHEAST	12.00	Cloudy
6:00		59	52	EAST	13.00	Cloudy

Source: National Weather Service, Louisville, Ky.

**Table 3**  
**TO-15 Data Summary for Gas Monitoring Well Samples**  
**at the Lee's Lane Landfill**  
**Sampling Date: April 25, 2006**

	Well Samples						
Sample ID	G1	G2	G3	G4	G5-L	G5-R	BLANK #1
Canister ID	RA2025	RA2034	RA2083	RA2073	RA2067	RA2071	RA2028
Dilution Factor	2.570	3	3	2.7928	3	2.6022	2.5374
Orifice	RA2025	RA2034	RA2083	RA2073	RA2067	RA2071	RA2028
Sampling Date	4/25/06	4/25/06	4/25/06	4/25/06	04/25/06	4/25/06	4/25/06
Compound (ppbV)							
Benzene	ND	0.30	0.10	ND	0.55	0.17	ND
Methylene chloride	ND	0.08	ND	ND	0.28	0.05	ND
Toluene	0.39	0.59	0.75	0.18	5.57	0.97	0.03
Vinyl chloride	ND	0.35	ND	ND	ND	ND	ND
Xylene (Total)	ND	0.19	0.08	ND	0.67	0.16	ND
Methane (ppmV)	13,700	2.93	5.72	1.84	6.61	5.91	ND

ND = Non-Detect